

**SONNEBORN'S**

**LAPIDOLITH  
LIQUID**

THE PATENTED  
LIQUID HARDENER and  
DUSTPROOFER for  
CONCRETE and  
TERRAZZO FLOORS

**NOTE TO MAINTENANCE ENGINEERS**

For your convenience we have combined in this one folder a brief description of what Lapidolith Liquid is and how it can be used by you in your plant. If you need additional copies for cross-filing, or more information on Lapidolith Liquid or its application, please write our main office.

NICK REIDY  
SALES & WAREHOUSE  
4971 FYLER AVE.  
FL 4000

25-G



100¢ per gal (3 coats) = \$1.75 less 10% =

## ● THE CONCRETE HARDENER THAT CANNOT BE COPIED

In the early 1900's Sonneborn introduced the simple and effective method of dustproofing and hardening concrete floors by a chemical hardener known as Lapidolith Liquid. For years this fine product has been used in countless factories, schools, and other buildings from coast to coast. Hundreds of testimonials praise its effectiveness.

Our laboratories have recently developed a radical improvement in Lapidolith Liquid which increases notably the extent to which it penetrates into the structure of the concrete, and assures even more lasting hardening action than has ever before been possible. This improvement is so basic in fact, that the U. S. and British Patent Offices recognized this invention and Lapidolith Liquid is now protected by both U. S. and British patents.

## ● IMPROVED WETTING ACTION, SPREADING EFFICIENCY AND PENETRATION

Two unique and outstanding discoveries were the basis for securing the patents.

1. Lapidolith Liquid has at least 100% lower surface tension than any concrete floor hardening solution of the same concentration. This means deeper penetration—more thorough hardening.
2. The low surface tension assures a more effective reaction with the lime and calcium carbonate in the cement because Lapidolith Liquid reaches into the tiny voids and capillaries which ordinary hardeners cannot penetrate.

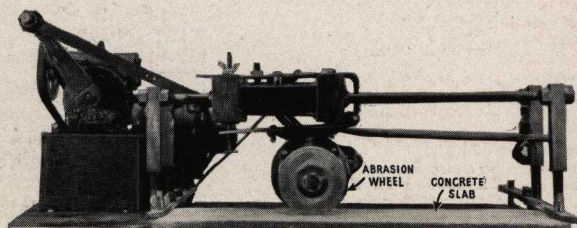
This effective penetration prevents the "blocking off" caused by surface reactions to which ordinary liquid hardeners are so frequently subject.

# NOT ONE, BUT MANY TESTS PRO

## ✓ FOR HARDNESS ON HEAVY DUTY FLOORS

The degree of hardness imparted to concrete by Lapidolith Liquid is confirmed by the following scientific evaluations:\*

Taking the abrasion index of untreated 1:2 concrete as 100, scientific tests, conducted by independent laboratories, of the effectiveness of Lapidolith Liquid in hardening concrete, have shown that the treatment raises the abrasion index of the concrete to 225 or more than twice the value for the untreated surface. By comparison, a hardening treatment based on the use of surface aggregates raised the abrasion index to 167 or only two-thirds above the value of the untreated concrete.



\* Obtained with modified Dorry Abrasion Testing Machine, illustrated herewith.

## ✓ FOR DUSTPROOFNESS

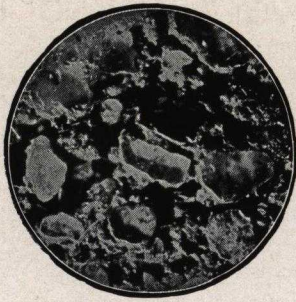
Concrete cubes, two weeks old, some treated with Lapidolith Liquid and some untreated show the following comparison after 200 revolutions of an abrasive disc.

	Grams
Untreated sample weighed before test .....	750
After the test .....	429
Loss in weight 41% or .....	321
Lapidolized sample weighed before the test .....	770
After the test .....	742
Loss of only 3 1/2% or .....	28

The above tests confirm over a quarter of a century's experience in the treatment of millions of square feet of concrete. Lapidolized concrete attains a degree of hardness which, when subjected to traffic, virtually makes it immune to dusting—concrete dust is usually the first sign of concrete disintegration.



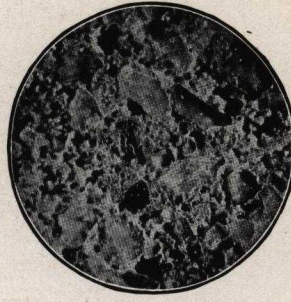
● SEE FOR YOURSELF HOW LAPIDOLITH LIQUID WORKS



50 diameters

UNTREATED CONCRETE

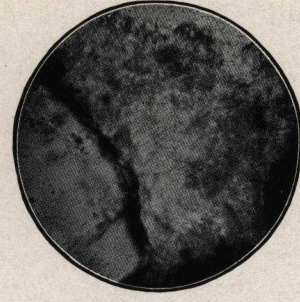
Note the large numerous voids (black spots) and the roughness of the surface.



50 diameters

LAPIDOLIZED CONCRETE

Note the roughness is reduced and the voids have been filled by a network of a newly formed hard crystalline substance.



120 diameters

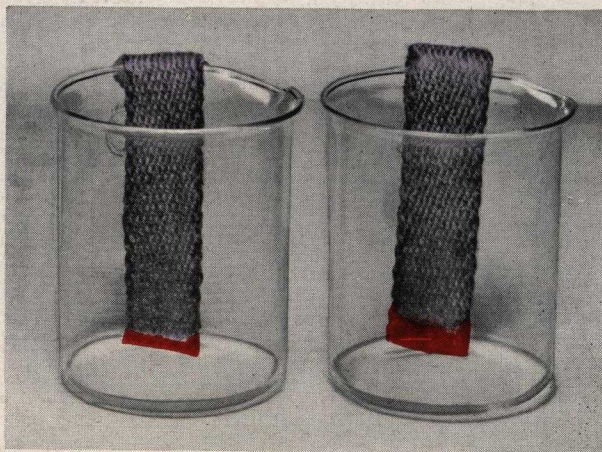
LAPIDOLIZED CONCRETE

Note the new component formed by the action of Lapidolith on the cement matrix. An isometric crystal form is indicated.

# LOVE THE SUPERIORITY OF SONNEBORN'S



## FOR PENETRATION OF LAPIDOLITH LIQUID



Graphic proof of the more effective penetration of Sonneborn's patented Lapidolith Liquid is shown by the following test which was made at the Foster D. Snell, Inc., Laboratories:

In the photograph are two glass beakers, the one on the right contains Lapidolith Liquid to a depth of one-tenth inch, the one on the left 20" Baumé

Solution of commercial silico-fluoride in the same amount.

Duplicate cotton wicks previously treated with blue litmus solution and dried were placed as shown in a vertical position. Since both solutions are acid in reaction to litmus, the wicks turn red at the line of contact.

But Patented Lapidolith Liquid, due to its superior wetting action, rose in the wick to nearly three-eighths inch within a half hour while the solution of the commercial silico-fluoride barely rose beyond the line of contact.

• • •

### Here's what the Snell Laboratories say:

"The accompanying photograph is a clear and accurate record of the results obtained. . . . It demonstrates clearly that Lapidolith Liquid has a much greater wetting power than an ordinary aqueous solution of commercial magnesium silico-fluoride of approximately the same density."

25-0



### WHAT SONNEBORN'S PATENTED LAPIDOLITH LIQUID WILL DO

- Will wearproof concrete floors.
- Will dustproof concrete floors.
- Will harden concrete floors.
- Will strengthen concrete wainscoting.
- Will harden floors containing iron filings or other special aggregate.
- Will waterproof and oilproof concrete floors, walls and containers.

### WHAT SONNEBORN'S PATENTED LAPIDOLITH LIQUID WILL NOT DO

- Will not make a pitted floor smooth.
- Will not color concrete floors.
- Will not cover floors with a film.
- Cannot be used on any floor which does not absorb water, such as painted floors.
- Should not be mixed with concrete.

Concrete floors treated with Lapidolith Liquid may be painted with Sonneborn's Cemcoat for floors.

# PATENTED LAPIDOLITH LIQUID

## ✓ FOR PERMEABILITY

Extensive tests were made and water forced under 30 lbs. pressure through pipes filled with untreated concrete and Lapidolized concrete. These tests showed that Lapidolized concrete absorbs only one-tenth as much water as untreated concrete. The figures below represent cu. cm. of water which permeated the bodies of concrete in given time:

Time Water Permeated	Untreated Concrete	Lapidolized Concrete
1st min.	1.132 cu. cm.	0.135 cu. cm.
30th min.	0.186 cu. cm.	0.074 cu. cm.
60th min.	0.174 cu. cm.	0.046 cu. cm.

Because Lapidolith Liquid reduces the permeability of concrete, it reduces the risk of damage from freezing during the winter months.

## ✓ FOR PROTECTION AGAINST OILS

This photograph shows a concrete block which was immersed in Oleic Acid for 10 weeks.



This part of the concrete block was treated with Lapidolith Liquid and shows no change.

This part was left untreated and shows the destructive action of Oleic Acid.

It is therefore recommended that wherever concrete is exposed to oils it be treated with Lapidolith Liquid for protection. This includes surfaces in oil refineries, warehouses, garages, machine shops, engine rooms, packing plants, soap factories, creameries, etc. The range of uses for concrete floors and tanks is thus extended, since heretofore their susceptibility to destruction by animal, vegetable, and mineral oils eliminated their use where these oils are encountered.



## SONNEBORN'S PATENTED LAPIDOLITH LIQUID IS EASY TO APPLY

### NO WAIT, NO DELAY OF PRODUCTION OR USE OF FLOORS

Concrete floors can be hardened and dustproofed with Lapidolith Liquid with no more effort than required for a simple washing of the floor. The floors can be used during the application. They should be dry, clean, and free from dust, oil, or paint. New floors must be thoroughly set and dry before applying Lapidolith Liquid.

Concrete of average density requires about one gallon for each 100 sq. ft. of surface for the three applications. If floors are made of colored cement or terrazzo send for special directions. Full instructions on how to apply Lapidolith Liquid simply and easily are furnished with every shipment.



For over 25 years, Lapidolith Liquid has been regarded as a most efficient and dependable treatment for the hardening and dustproofing of concrete. Here is a partial list of satisfied users:

#### CALIFORNIA

The Sunshine Company  
A. Fleishacker & Company

#### CONNECTICUT

McKesson & Robbins, Inc.  
New Departure Mfg. Co.  
Aetna Life Insurance Co.  
G. Fox Company  
Hartford Electric Light  
Electrolux Corp.  
Duke Laboratories, Inc.  
Norma-Hoffman Bearings Co.  
Town of Stratford  
The Wiremold Company

#### DELAWARE

Hercules Powder, Inc.  
E. I. duPont de Nemours Co.  
duPont High School

#### GEORGIA

Southern Bell Telephone Co.  
Pacolet Manufacturing Co.

#### ILLINOIS

American Car & Foundry Co.  
Chicago Stadium  
Clearing Industrial Dist.  
Commonwealth Edison Co.  
De Normandie Laundry  
Owens-Illinois Glass Co.  
Marshall Field & Co.  
Notre Dame High School  
Wurlitzer Organ Company  
The Cradle  
Western Clock Company  
Landstrom Furniture Co.

#### INDIANA

Indiana University  
Evansville College  
Mead Johnson & Co.  
Eli Lilly & Company  
Seagram Distillers Corp.  
Bendix Aviation Corp.

#### IOWA

The Oliver Farm Equipment Co.

#### KANSAS

University of Kansas  
Kansas State College  
Dr. Pepper Bottling Co.  
Southwestern Bell Telephone Co.  
Sears Roebuck & Co.

#### KENTUCKY

Schenley Distillers Corp.

#### LOUISIANA

Pan-American Petroleum Corp.  
Maison Blanche  
Tulane University

#### MARYLAND

Calvert Distillers Corp.  
Johns Hopkins Hospital  
University of Maryland  
Celanese Corp. of America  
Doughnut Mach. Co. of America  
Pangborn Corp.  
Bethlehem Steel Co.

#### MASSACHUSETTS

Boston Elevated Railway  
Danvers Bleachery Pequot Mills  
Holyoke Street Railway Co.  
General Electric Co.  
Municipal Stadium  
Ruberoid Company  
Cranberry Cannery, Inc.  
United Electric Company

#### MICHIGAN

Kellogg Company  
Ford Motor Company  
Great Atlantic & Pacific Tea Co.  
Bell Telephone Company  
Briggs Manufacturing Co.  
Cadillac Motor Car Division  
Chevrolet Motor Division  
The Diesel-Wemmer-Gilbert Corp.  
Detroit Creamery Co.  
Detroit Edison Company  
The Detroit Free Press

Fisher Brothers Building  
General Motors Corporation  
J. L. Hudson Company  
Parke, Davis & Co.  
University of Detroit  
U. S. Rubber Company  
Consumers Power & Light Co.

#### MINNESOTA

Cream of Wheat Corp.  
Land O'Lakes Creameries, Inc.  
University of Minnesota

#### MISSISSIPPI

Junior & Senior High Schools

#### MISSOURI

Lincoln University  
Johnson, Stephens & Shinkle Shoe Co.  
Stanley Rea Serum Company  
Essex County Vocational Schools

#### NEBRASKA

Wells-Abbott-Nieman

#### NEW HAMPSHIRE

Public Service of N. H.

#### NEW JERSEY

Jersey Central Power & Light Co.  
Blair Academy  
U. S. Coast Guard  
Congoleum-Nairn, Inc.  
Essex County Vocational Schools  
Y. M. C. A.  
Y. M. H. A.  
Y. W. H. A.  
Julius Forstmann Corp.  
Wright Aeronautical Corp.  
Merck & Co., Inc.

#### NEW YORK

Grumman Aircraft Corp.  
Drake Bakeries, Incorporated  
Brooklyn Borough Gas Co.  
Seversky Aircraft Corp.  
Remington Rand, Inc.  
The Upson Company

Madison Square Garden  
Ingersoll-Rand Company  
Life Savers Corp.  
Neisner Bros. Co.

#### NORTH CAROLINA

McCrary Mills Co.  
Duke Power Co.  
Horton Motor Lines  
Duke University  
Burlington Mills  
Proximity Mfg. Co.  
P. H. Hanes Knitting Co.  
Taylor Tobacco Company

#### OHIO

Ohio Edison Company  
Ohio University  
Ohio Power Company  
Crampton Canneries, Inc.  
Kroger Grocery & Baking Co.  
Procter & Gamble Co.  
Republic Steel Corporation  
Ohio State University  
Dayton Rubber Mfg. Co.  
Frigidaire Div. of General Motors  
Miami University  
The American Rolling Mill Co.  
Wrenn Paper Co.  
Val Decker Packing Co.  
Selby Shoe Company  
Hinde & Dauche Paper Co.  
La Salle Koch Co.  
Toledo Edison Company  
The Ohio Match Co.

#### OKLAHOMA

Dewey Portland Cement Co.

#### PENNSYLVANIA

Standard Pressed Steel Co.  
McKeesport Tin Plate Co.  
Collins & Aikman Corp.  
Philadelphia Electric Co.  
Sun Oil Company  
Aluminum Co. of America

Bell Telephone Company of Pa.  
West Penn. Power Co.  
Joseph S. Finch Co.  
Jesuit Novitiate

#### RHODE ISLAND

Patton-MacGuer Co.

#### SOUTH CAROLINA

Citadel  
Clemson College

#### TENNESSEE

Gray Hosiery Mills  
Borden Mills  
General Shoe Corp.  
M. E. Publishing House South  
Vanderbilt University

#### VIRGINIA

Virginia Polytechnic Institute  
Greyhound Bus Terminal  
Dan River Mills  
Coca Cola Bottling Co.  
Newport News Shipbuilding & Drydock

American Radiator Company  
Philip Morris & Co., Ltd., Inc.  
Southern Biscuit Co.  
Dr. Pepper's Bottling Works  
Viscose Corp. of America

#### WASHINGTON

Bemis Bro. Bag Co.

#### WEST VIRGINIA

Kanawha Valley Bank Building  
Harker Pottery Co.  
C. & P. Telephone Co.

#### WISCONSIN

Shefford Cheese Co., Inc.  
Wisconsin Power & Light Co.  
Municipal Stadium  
Omar Bakeries  
Frozen Foods & Storage Corp.

#### WYOMING

Midwest Refining Co.



# Use these other Sonneborn Quality Products to keep your buildings at their best

## FOR FINISHING AND PROTECTING WOOD FLOORS

Lignophol—one application preservative and finish; easy to apply; easy to maintain; long term performance without retreatment; low unit cost.

## FOR GIVING CONCRETE FLOORS A DECORATIVE FINISH

Cemcoat Filler and Dustproofer—for giving floors a tough wearing coating; in colors and transparent; long-lasting durable finish.

Other tested treatments for patching and repairing old or new floors are also available.

## FOR WAXING FLOORS

Liquid, paste and rubless types.

## FOR CAULKING

Airproof, non-shrinking, waterproof compounds; particularly adapted for caulking around window frames and door jambs, waterproofing cracks and crevices in concrete, etc.

## FOR PAINTING OF INTERIORS AND EXTERIORS

Paint, Varnish, Enamel and Protective Coatings. A suitable, efficient type of product and finish available for walls, ceilings, equipment, etc.; for masonry, wood, and metal surfaces.

## FOR ROOF PROTECTION

Stormtight and other tested protective coatings to meet various conditions.

## FOR WATERPROOFING

Hydrocide for masonry waterproofing and dampproofing foundations. Colorless Hydrocide for exterior walls above grade.

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For full details on any of the above quality products and for complete catalogue of all Sonneborn Maintenance Products please write to our main office. Our Technical Service Department is available for "on the spot" assistance in overcoming especially troublesome problems. This service is available on request and involves no obligation.

*Where Results Count—Count on Sonneborn*

**L. SONNEBORN SONS, INC.**  
88 LEXINGTON AVE. NEW YORK, N. Y.

### TIMELY INFORMATION

The application of Lapidolith Liquid will not interfere with your working schedule. The floors can be kept in use during and directly after the application of Lapidolith Liquid, if necessary.



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